

Abstract

A method of preventing contaminating particles in a chamber in a deposition device is presented. In the method, a substrate is mounted within a chamber of gas-exposure equipment. The pressure within the chamber is reduced and a treatment gas is injected into the chamber to convert a surface of the substrate to be organic. After a desired time is elapsed, the pressure within the chamber is allowed increase to atmospheric pressure or above by introducing nitrogen gas into the chamber. Nitrogen gas introduction prevents entry of air, including the moisture within the air.

Without the moisture, contaminating particles are not generated since the moisture is prevented from reacting with an ammonia component of the treatment gas.